APPENDIX D

STATE LAWS, REGULATIONS, AND GUIDES
FOR URANIUM MINING

Table D.1 State laws, regulations, and guides for uranium mining

State	General			Mining							
	NRC	NPDES		Permits		Env	ironmental O	nmental Quality			
	Agreement <u>State</u>	Permit <u>State</u>	Water Use	Exploration Rights	Mining Rights	Air	Water		Land		
								<u>UG</u> S	olids	Reclam.	Safet
COLORADO	Yes	Yes		-	-		<u>-:</u>	_			
Department of Health							·				
Water Quality Control Div.	-	-	-	-	-		6,7,8,10	8,9,1	0 -	_	_
Air Quality Control Div.	-	-	-	-	-	4,5	-	_	-	_	_
Department of Natural Resources	5					•					
Div. of Water Reserves (State	_	_	15	-	-	-	_	-	-	_	_
Board of Land Commissioners Mined Land Reclam. Bd. Division of Mines	-	-	-	1	1	_	_	-	-	1	_
	-	_	-	2,3	2,3	-	2,3	2,3	-	2,3	-
	-	-	-	-	-	_	_	-	-	-	14
NEW MEXICO State Land Commission	Yes	No	_	_	_	_	_	-	_	_	_
	_	_	_	1	1	_	_	_	_	_	_
Dept. of Energy and Minerals	-	-	_	-	-	_	_	_	_	2	g
Dept. of Natural Resources	_	_	3	÷	_	_	_	_	-	-	_
Env. Improvement Div.	-	-	-	-	-	5,6,7,8,9	10,12,13,14	11	14	-	16
TEXAS Dept. of Water Resources R.R. Commission of Texas	Yes	No	_	-	- ,	-	-	_	_	_	_
	-	_	13	_	3	_	8,9	_	4,11	Δ	_
	-	-	-	1	ī	5	5	2,7	-	ž	_
General Land Office	-	-	-	14	14	_	-		-	15	-
Dept. of Health	- `	-	-	_	-	_	6,10	_	_	-	10
Air Control Board	-	-	-	<u>-</u> ·	-	12	-	-	-	-	-
UTAH	No	No	-	_	_	_	_	_		_	
State Engineer	_	-	3,4	-	_	_	-	_	_	_	_
Dept. of Social Services	-	-	-	_	-	_	-	-	_	_	_
Division of Health	-	_	_	-	_	5 -	1	1	-	_	5
Water Pollution Control Bd.	-	-	_	-	_	<u> </u>	ī	ī	_	_	-
Dept. of Natural Resources	_	_	-	2	2	_	-	_	_	2	_

Table D.1 (continued)

!	GENERAL			Mining							·
	NRC	NPDES		Pen			Environmental Quality				
	Agreement <u>State</u>	Pennit <u>State</u>		Exploration Rights	Mining <u>Rights</u>	<u>Air</u>	Water		Land		•
							Surt	UG	Solids	Reclam.	Safety
WASHINGTON	Yes	Yes							<u> </u>		
	162	162	-	1 2	1 2	•	_	_	2	2	_
Dept. of Natural Resources Dept. of Ecology	-	-	_	1,2	1,2	•	-	-	4	2	•
	-	-	9	-	-	-	-	(1)-1	-	-	-
Office of Water Programs		-	-	-	-	-	8	(No)	-	-	-
Dept. of Social Services &	Health	-	-	-	-	-	- '	-	-	-	-
Health Services Division	-	-	-	-	-	-	-	-	-	-	3
Air Quality Division	-	-	-	~	-	7	•	-	-	-	-
WYOMING	No	Yes	-	•	-	-	-	-	-	_	-
State Inspector of Mines	-	-	-	8a	3a	-	-	-	-	8d	8c
State Engineers Office	-	-	1	•	-	-	-	-	-	_	
Dept. of Env. Quality	-	-	_	-	_	-	-	-	_	_	-
Air Quality Div.	_	-	-	-	_	3a,4	-	_	-	_	_
Water Quality Div.	-	-	-	-	-	_	2,5	5,6	_	-	_
Land Quality Div.	-	_	-	3с	3с	_	-,-	-	3c,7	3c,7	_
Solid Waste Management	-	-	-	-	-	-	-	-	3d	-	-

<u>Colorado</u>

- Mining Rules and Regulations, 1973, 1976; Uranium Mining Lease and Prospecting Permit; State Board of Land Commissioners.
- Colorado Mined Land Reclamation Act, July 1, 1976; Mined Land Reclamation Board (Act. 32, Title 34, C.R.S. 1973, as amended).
- 3. Rules and Regulations, Colorado Mined Land Reclamation Board; effective July 1978.
- 4. Colorado Air Quality Control Act of 1979, adopted June 20, 1979. Replaces Colorado Air Pollution Control Act of 1970. Radioactive materials included in list of air pollutants.
- 5. Colorado Air Quality Control Regulations and Ambient Air Quality Standards, Colorado Air Pollution Control Commission. Specifically, Regulation No. 1, Emission Control Regulations for Particulates, Smokes, and Sulfur Oxides for the State of Colorado; and Regulation No. 3, Regulation Governing Air Contaminant Emission Notice, Emission Permit, and Fees for Direct Sources.
- 6. Regulations Establishing Basic Standards and an Antidegradation Standard and Establishing a System for Classifying State Waters, for Assigning Standards, and for Granting Temporary Modifications, Colorado Water Quality Control Commission, May 22, 1979; effective July 10, 1979.
- 7. Regulations for Effluent Limitations, Colorado Department of Health, Water Quality Control Commission; adopted March 18, 1975 effective August 21, 1975.
- 8. Regulations for the State Discharge Permit System, Colorado Department of Health, Water Quality Control Commission; adopted November 19, 1974 effective January 31, 1975, amended February 7, 1978.
- 9. Rules for Subsurface Disposal Systems, Colorado Department of Health, Water Quality Control Commission; revised July 6, 1976, effective October 1, 1977.
- 10. Guidelines for Control of Water Pollution from Mine Drainage, November 10, 1979; Water Pollution Control Commission (Ch 66, Act. 28, C.R.S. 1963 as amended 1970).
- 11. Colorado Rules and Regulations Pertaining to Radiation Control, April 1, 1978, Uranium Mill Licensing Guide, May 1978; Radioactive Materials License; Radiation and Hazardous Wastes Control Division (Title 25, Act. II, C.R.S. 1973, Radiation Control).

- 12. Guidelines for the Design, Operation, and Maintenance of Mill Tailings Ponds to Prevent Water Pollution, March 13, 1968; Water Pollution Control Commission (Colorado Water Pollution Control Act of 1966, Ch. 44, Session Laws 1966 as amended by Ch. 217).
- 13. Publication of a Regulation Providing Tailings Piles from Uranium and Thorium Mills be Adequately Stabilized or Removed, Colorado Department of Public Health; effective June 10, 1966.
- 14. Colorado Division of Mines responsible for health and safety standards for uranium mines and mills. Regulations contained in Bulletin 20: Section 108 "Missed Holes--Misfires," Section 110 "Mucking," Section 12.2 "Radiation Control," Section 130 "Safeguards," Section 140 "Shafts and Raises."
- 15. Office of State Engineer, Division of Water Resources (Article 16, Section 5 Colorado Constitution and Title 37, Article 90, Section 137 Colorado Revised Statutes, 1973).

Barrier Commence of the State o

New Mexico

- 1. State Land. Leased by State Land Commission, 19-8-14 NMSA 1978.
- 2. State and Private Land. Mine plan filed and approved by State Mining Inspector, 67-5-1 et seq. NMSA 1978.
- 3. Water Permit issued by State Engineer; 72-5-1 et seq. NMSA 1978 and 72-12-1 NMSA 1978 and Desert Lands Act of 1866 as amended and 43 USC 383.
- 4. NRC agreement State Under 42 USC 2021. License required for source material: unrefined and unprocessed ore is not included. Specific License required for Mills, 10 CFR 40.20 40.31. Administered by Environmental Improvement Division (EID).
- 5. New Mexico delegated responsibilities and powers under Clean Air Act (40 CFR 52.1620).

 Ambient Air Quality Standards and Air Quality Control Regulations, State of New Mexico Health Department, Environmental Improvement Division; reissued November 1976.
- 6. Application for Permit and Certificate of Registration General Form for Sources Located Within the State of New Mexico, New Source Review Section, Air Quality Section, Environmental Improvement Division, revised February 1976.
- 7. Application for Permit to Construct or Modify and Certificate of Registration for Mineral Processing Plants Located within the State of New Mexico, New Source Review Section, Air Quality Section, Environmental Improvement Division, revised February 1976.
- 8. Supplementary Information and Notes for Use with Application for Permit and Certificate of Registration for Mineral Processing Plants, State of New Mexico Environmental Improvement Division, Air Quality Section, New Source Review Section.
- 9. Monitoring Air Quality in Mines and Mills Underground: State Mine Inspector 69-5-7 NMSA 1978 also MSHA (30 CFR 57.5-37) Restricted Areas: Mills, EID, 74-2-13 NMSA 1978 Unrestricted Areas: EID per Clean Air Act (42 USC 7410) and State Radiation Protection Act (74-2-1 et seq. NMSA 1978).
- 10. New Mexico Water Quality: Not NPDES approved by EPA. State does not require permit per 74-6-5 NMSA 1978 and parts 2-100 of N.M. Water Quality Regulations if EPA issues NPDES permit.
- 11. Underground Water. State EID regulates pollution of underground water per 74-6-1 et seq. NMSA 1978.

- 12. Water Quality Radioactivity: Mines by EID according to Sec. 2-101(b) of N.M. Water Quality Regulations; Mills by EID per NRC 10 CFR 20.106 and Appendix B.
- 13. Water Quality Standards on Enforcement: EPA enforces under NPDES system for effluent streams entering surface water of United States: EID enforces N.M. groundwater standards under N.M. Water Quality Control Act, 74-6-1 et seq. NMSA 1978.
- 14. Amended Water Quality Control Commission Regulation, Parts 1,2,3, and 4, Water Quality Control Commission; January 11, 1977, as amended June 14, 1977 and November 8, 1977. Water Quality Standards for Interstate and Intrastate Streams in New Mexico, Water Quality Control Commission under the authority of Paragraph C, Section 74-6-4 of the New Mexico Water Quality Act (Chapter 326, Laws of 1973, as amended); adopted August 22, 1973, revised September 29, 1975, January 13, 1976, February 8, 1977 and March 14, 1978.
- 15. New Mexico Environmental Improvement Agency Uranium Mill License Application Guidelines, Radiation Protection Section; September 1977.
- 16. (a) Radiation Protection Act, Chapter 185 Laws of 1959 (as amended by Chapter 284 Laws of 1971 and by Chapter 343 Laws of 1977).
 - (b) New Mexico Environmental Improvement Agency Regulations for Governing the Health and Environmental Aspects of Radiation, Environmental Improvement Board, June 16, 1973.

<u>Texas</u>

- 1. Texas Uranium Surface Mining and Reclamation Act (May 1978), Rules of the Surface Mining and Reclamation Division. The Railroad Commission of Texas, July 1, 1979.
- 2. Surface Mining Permit Rule 102 Elements of Permit Application, Rule 250 Reclamation Plan; Rules of the Surface Mining and Reclamation Division.
- 3. Application for Permit to Conduct In Situ Uranium Mining, Instructions and Procedural Information for Filing an Application for a Permit to Conduct In Situ Mining of Uranium, Texas Department of Water Resources.
- 4. Technical Report for In Situ Uranium Mining, Texas Department of Water Resources.
- 5. Surface Mining Permit, Rule 108 Permit Approval (Rules of the Surface Mining and Reclamation Division). Permit shall be granted if application complies with Permit rules and all applicable Federal and State laws. Permit may be approved conditioned upon approval of all other required State permits or licenses.
- 6. Texas Department of Health (TDH) issues licenses for surface mining, in situ mining, milling and processing of uranium ores and leachates in accordance with NRC Agreement.
- 7. TDH implements U.S. Safe Drinking Water Act regarding public water supplies. The underground injection portion of SDWA is regulated by the Railroad Commission (Oil and Gas), Department of Water Resources (in situ mining of uranium, salt, and sulfur).
- 8. Texas Regulations for Control of Radiation and Texas Water Quality Standards apply to surface water . throughout state.
- 9. Texas Department of Water Resources issues "no discharge" permits to all uranium in situ extraction processes.
- 10. Texas Radiation Control Act, 1971. Texas Regulations for Control of Radiation (TDH).
- 11. Texas Solid Waste Disposal Act, 1969 (Texas Department of Water Resources). Rules pertaining to Industrial Solid Waste Management, March 3, 1978.
- 12. Texas Air Control Board. Air Control Board H-76 bill introduced February 1, 1979 to include radioactive material in the definition of air contaminant and allow Board to charge fees for permits and variances.

- 13. Texas Water Code, Chapter 2 "Water Use" Texas Department of Water Resources.
- 14. Rules and Regulations for Prospecting and Mining State-owned minerals. General Land Office Rules 12.6.18.03.001-.006 (Feb. 17, 1976).
- 15. Texas Uranium Surface Mining and Reclamation, General Land Office Rules 135.18.05.001-.005.

<u>Utah</u>

- 1. Utah Water Pollution Control Act, Utah State Divison of Health.
 - (a) Wastewater Disposal Regulations, Part I, Definitions and General Requirements, State of Utah, Department of Social Services, Division of Health; adopted by Utah Water Pollution Control Board, May 18, 1965, Utah State Board of Health, May 19, 1965, (Revised by Utah Water Pollution Control Committee, Nov. 2, 1978) under authority of 26-15-4 to 5 and 73-14-1 to 13, Utah Code annotated, 1953, as amended.
 - (b) Wastewater Disposal Regulations, Part II, Standards of Quality for Waters of the State, State of Utah Department of Social Services, Division of Health; adopted by Utah Water Pollution Control Board May 18, 1965, Utah State Board of Health May 19, 1965, revised by action of the Boards June 2, 1967 and June 21, 1967, further revised by action of the Utah Water Pollution Committee September 13, 1973, and by action of the Utah State Board of Health October 23, 1978.
 - (c) Wastewater Disposal Regulations, Part III, Sewers and Wastewater Treatment works. Consideration of Waste stabilization Ponds (Lagoons) for Industrial Wastes is subject to requirements determined from analysis of the engineers report and other available pertinent information in addition to sections 83-91.
 - (d) Wastewater Disposal Regulations, Part IV, Individual Wastewater Disposal Systems.
 - (e) Wastewater Disposal Regulations, Part V, Small Underground Wastewater Disposal Systems.
- 2. Changes and Additions to the General Rules and Regulations, adopted by the Board of Oil, Gas and Mining; March 22, 1978, effective June 1, 1978.
 - (a) Rule M-3 -- Notice of Intention to Commence Mining Operations.
 - (b) Rule M-10 -- Reclamation Standards.
- 3. Water Laws of Utah and Interstate Compacts and Treaties (Second Edition, 1964).
- 4. State Engineer, H.B. No. 167 "Temporary Applications to Appropriate Water" introduced in the 1979 General Session, an act enacting Section 73-3-5.5, Utah Code Annotated 1953.

- 5. Utah Radiation Protection Act; Utah Code Annotated, 1953; Title 26, Chapter 25 Radiation Control.
- 6. Utah Air Conservation Regulations, State of Utah, Department of Social Services, Division of Health; adopted by the Utah Air Conservation Committee and the Utah State Board of Health September 26, 1971; revised January 23, 1972; July 9, 1975; May 22, 1977; February 1979; under authority of 26-15-5 and 26-24-5 Utah Code annotated, 1953, as amended.

Washington

- 1. Mineral Leasing Laws, Revised 1965. (Laws cover surface and underground but not in situ and heap leaching).
- 2. Rules and Regulations Relating to Protection and Restoration of Lands disturbed through Surface Mining, October 20, 1970 (Surface Mined Land Reclamation Act, Ch 64, 1970, Sec. 5 RCW 78.44-- only applies to surface mining on private and state-owned lands).
- 3. Rules and Regulations for Radiation Protection, Chapter-402-22 WAC, Specific Licenses.
- 4. Rules and Regulations for Radiation Protection, Sec. 402-24-220 WAC, Concentrations in Air and Water for Release to Restricted and Unrestricted Areas.
- 5. Rules and Regulations for Radiation Protection, Chapter 402-24 WAC, Standards For Protection Against Radiation.
- 6. Rules and Regulations for Radiation Protection, Chapter 402-52 WAC, Uranium and/or Thorium Mill Operation and Stabilization of Mill Tailings Piles.
- 7. Clean Air Act, Revised Washington Administrative Code, Rev., Chapter 70.94, RCW.
- 8. Water Quality Standards, State of Washington, Department of Ecology; June 19, 1973. (Revised Dec. 19, 1977). Water Pollution Control Act of 1970 (as amended).
- 9. Department of Ecology Water Use -
 - (a) Water Pollution Control: Chapter 90.48 RCW
 - (b) Water Code 1917 Act: Chapter 90.03 RCW
 - (c) Regulations of Public Groundwaters: Chapter 90.44 RCW.

Wyoming

- 1. Regulations and Instructions, Part I, Surface Water, Wyoming State Engineer's Office, revised January 1974.
- Condensed Detailed Instructions for Preparation of Surface Water Applications and Accompanying Maps for Facilities (pollution control and others) for Mining and Other Industrial Operations, revised 4-28-78. Effluent Limitations and Monitoring Requirements: Wyoming's BPT for Uranium Mine Waters.
- 3. Wyoming Environmental Quality Act, as amended, Department of Environmental Quality: 1973 Cumulative Supplement, 1974 Session Laws, 1975 Session Laws, 1976 Session Laws, 1977 Session Laws.
 - (a) Article 2 Air quality Regulations.
 - (b) Article 3 Water quality.
 - (c) Article 4 Land Quality. Guidelines No. 1-6 and 8.
 - (d) Article 5 Solid Waste Management.
- 4. Wyoming Air Quality Standards and Regulations, Department Environmental Quality, filed January 25, 1979.
- 5. Water Quality Rules and Regulations, Department of Environmental Quality: Chapter I, Quality Standards for Wyoming Surface Waters, filed July 17, 1979; Chapter II, Discharges/Permit Regulations for Wyoming 1974; Chapter IV, Regulations for Discharge of Oil and Hazardous Substances into Water of the State of Wyoming, June 13, 1978.
- 6. Proposed Groundwater Regulations: WQD Chapter VIII, Quality Standards for Groundwater of Wyoming (1979); WQD Chapter IX, Wyoming Groundwater Pollution Control Permit (1979).
- Wyoming Land Quality Rules and Regulations, Department of Environmental Quality, filed October 6, 1978, amended September 13, 1979.
- 8. State of Wyoming Non-Coal Mining Laws, Safety Rules and Regulations, Title 30--Mines and Minerals.
 - (a) Chapter 1 General Provisions
 - (b) Chapter 2 Bureau of Mining Statistics
 - (c) Chapter 3 Mining Operations Generally (Article 4 Safety Regulations)
 - (d) Chapter 3 Mining Operations Generally (Article 5 Open Cut Land Reclamation)